



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-3713; Directorate Identifier 2015-NE-23-AD; Amendment 39-18425; AD 2016-05-07]

RIN 2120-AA64

Airworthiness Directives; Engine Alliance Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Engine Alliance (EA) GP7270 turbofan engines. This AD was prompted by reports of the installation of non-conforming honeycomb cartridges in the high-pressure compressor (HPC) adjacent to the HPC rotor stage 2 to 5 spool and stage 7 to 9 spool. This AD requires removal and replacement of the affected HPC rotor stage 2 to 5 and stage 7 to 9 spools and adjacent honeycomb cartridges. We are issuing this AD to prevent failure of the HPC rotor stage 2 to 5 and stage 7 to 9 spools, which could lead to uncontained engine failure and damage to the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact Engine Alliance, 400 Main St., East Hartford, CT 06108, M/S 169-10, phone: 800-565-0140; email: help24@pw.utc.com; website: www.engineallianceportal.com. You may view this service

information at the FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-3713.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-3713; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Kyle Gustafson, Aerospace Engineer, Engine & Propeller Directorate, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7183; fax: 781-238-7199; email: kyle.gustafson@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain EA GP7270 turbofan engines. The NPRM published in the Federal Register on October 23, 2015 (80 FR 64373). The NPRM was prompted by reports of the installation of non-conforming honeycomb cartridges in the HPC adjacent to the HPC rotor stage 2 to 5 spool and stage 7 to 9 spool. The NPRM proposed to require removal and replacement of the affected HPC rotor stage 2 to 5 and stage 7 to 9 spools and adjacent

honeycomb cartridges. We are issuing this AD to correct the unsafe condition on these products.

Related Service Information under 1 CFR part 51

We reviewed EA Service Bulletin (SB) EAGP7-72-327, dated July 21, 2015; and SB EAGP7-72-328, dated July 21, 2015. The SBs describe procedures for removal and replacement of the affected HPC rotor stage 2 to 5 spools and HPC rotor stage 7 to 9 spools and adjacent honeycomb cartridges. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

Support for the NPRM (80 FR 64373, October 23, 2015)

A commenter supports the NPRM (80 FR 64373, October 23, 2015).

Request to Change Applicability

EA requested that we expand the applicability to include GP7272 and GP7277 turbofan engines models. EA stated that the AD applies to GP7272 and GP7277 turbofan engines ratings in addition to GP7270.

We disagree. No GP7272 or GP7277 turbofan engines have been delivered. New engines would be delivered in the corrected configuration and would not be impacted by this AD. We did not change this AD.

Request to Change the Unsafe Condition Statement

EA requested that we change the unsafe condition statement to "We are issuing this AD to prevent a hazardous engine condition." because no engine failures have occurred in the field due to non-conforming honeycomb cartridges.

We disagree. The unsafe condition describes the condition we are trying to prevent and is the justification for this AD. It does not describe what has occurred in the past. We did not change this AD.

Request to Change the Summary and Relevant Service Information Paragraphs

EA requested that we include “honeycomb cartridges” in the Summary and Relevant Service Information paragraphs to indicate that the honeycomb cartridges require replacement.

We agree because the proposed change more completely describes the requirements of this AD. We changed the Summary and Relevant Service Information paragraphs of this AD.

Request to Change the Relevant Service Information, Applicability, and Compliance Paragraphs

EA requested that we revise the Relevant Service Information, Applicability, and Compliance paragraphs of this AD to allow future revisions of the applicable Service Bulletins (SBs).

We disagree. We are only authorized to mandate use of SBs that we have reviewed and which are published. Since future revisions of SBs are not yet published, we are not authorized to mandate their use. We did not change this AD.

Request to Change the Compliance Paragraph

EA requested that we revise Compliance paragraph (e)(1)(ii) of this AD to “Remove and replace the honeycomb cartridges on the HPC stage 5 vanes with a part eligible for installation.”

EA also requested that we revise Compliance paragraph (e)(2)(ii) to “Remove and replace the honeycomb cartridges on the HPC stage 6, stage 7, and stage 8 vanes with a part eligible for installation.”

We agree. We changed “remove” to “remove from service” and “seal” to “cartridges” and added “...with a part eligible for installation” in compliance paragraphs (e)(1)(ii) and (e)(2)(ii) of this AD.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously:

- Are consistent with the intent that was proposed in the NPRM (80 FR 64373) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (80 FR 64373).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD affects zero engines installed on airplanes of U.S. registry. The average labor rate is \$85 per hour. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$0.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air

commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2016-05-07 **Engine Alliance:** Amendment 39-18425; Docket No. FAA-2015-3713;
Directorate Identifier 2015-NE-23-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION
IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Engine Alliance (EA) GP7270 turbofan engines with one or both of the following installed:

(1) A high-pressure compressor (HPC) rotor stage 2 to 5 spool, part number (P/N) 382-104-807-0, with a serial number (S/N) listed in EA Service Bulletin (SB) EAGP7-72-327, dated July 21, 2015; or

(2) An HPC rotor stage 7 to 9 spool, P/N 2031M90G04, 2031M90G05, or 2031M90G07, with an S/N listed in EA SB EAGP7-72-328, dated July 21, 2015.

(d) Unsafe Condition

This AD was prompted by reports of the installation of non-conforming honeycomb cartridges in the HPC adjacent to the HPC rotor stage 2 to 5 spool and stage 7 to 9 spool. We are issuing this AD to prevent failure of the HPC rotor stage 2 to 5 spools and stage 7 to 9 spools, which could lead to uncontained engine failure and damage to the airplane.

(e) Compliance

Comply with this AD within the compliance times specified, unless already done. Within 30 days after the effective date of this AD or before accumulating 2,100 engine cycles since the last disassembly of the compressor module of the engine, whichever occurs later:

(1) For engines with an HPC rotor stage 2 to 5 spool, P/N 382-104-807-0, installed with an S/N listed in EA SB EAGP7-72-327, dated July 21, 2015, do the following:

(i) Remove from service the HPC rotor stage 2 to 5 spool and replace with a part eligible for installation.

(ii) Remove from service the honeycomb cartridges on the HPC stage 5 vanes and replace with parts eligible for installation.

(2) For engines with an HPC rotor stage 7 to 9 spool, P/N 2031M90G04, 2031M90G05, or 2031M90G07 installed with an S/N listed in EA SB EAGP7-72-328, dated July 21, 2015, do the following:

(i) Remove from service the HPC rotor stage 7 to 9 spool and replace with a part eligible for installation.

(ii) Remove from service the honeycomb cartridges on the HPC stage 6, stage 7, and stage 8 vanes and replace with parts eligible for installation.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(g) Related Information

For more information about this AD, contact Kyle Gustafson, Aerospace Engineer, Engine & Propeller Directorate, FAA, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7183; fax: 781-238-7199; email: kyle.gustafson@faa.gov.

(h) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Engine Alliance Service Bulletin (SB) EAGP7-72-327, dated July 21, 2015.

(ii) Engine Alliance SB EAGP7-72-328, dated July 21, 2015.

(3) For Engine Alliance service information identified in this AD, contact Engine Alliance, 400 Main St., East Hartford, CT 06108, M/S 169-10, phone: 800-565-0140; email: help24@pw.utc.com; website: www.engineallianceportal.com.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on February 26, 2016.

Colleen M. D'Alessandro,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.

[FR Doc. 2016-05702 Filed: 3/14/2016 8:45 am; Publication Date: 3/15/2016]